

# **Cover Crop**

# Vermont Conservation Practice Job Sheet

340



### **SPECIFICATIONS**

Site-specific requirements are listed on the following page(s) of this job sheet. Specifications are prepared in accordance with the Cover Crop 340 practice standard found in the Vermont NRCS Field Office Technical Guide. Information contained in this document is considered part of the conservation plan.

Client Name:	Town:
Farm:	Tract:
Designed By:	Date:
Total Acres:	MLRA:

Purpose: Check all that apply	
Reduce erosion from wind and water	Promote biological nitrogen fixation
Increase soil organic matter	Increase biodiversity
Manage excess nutrients in the soil profile	Weed suppression
Provide supplemental forage	Soil moisture management

### **GENERAL CRITERIA:**

- Plant species, seedbed preparation, seeding rates, seeding dates, seeding depths, and planting methods will be consistent with approved local criteria and site conditions.
- The species selected will be compatible with the nutrient management and pest management provisions of the plan, if applicable.
- Cover crops will be terminated by harvest, frost, mowing, tillage, and/or herbicides in preparation for the following crop.
- If herbicides are to be used with cover crops, they shall be compatible with the following scheduled crop.
- Cover crop residue will not be burned.

<u>Date of Seeding:</u> Cover crops are typically sown as soon as possible after crop harvest. Some of the most successful cover crops are 'inter-seeded'; they are sown at the same time or immediately following the last cultivation of row crops. Cover crops will be sown between August 15 and September 15. In some localized regions within the state, slightly later planting dates may be appropriate. These areas include the Champlain Basin Area (MLRA 144A and western portions of 142 where lake effect may produce slightly warmer climate) and southern sections of the Connecticut River Valley (MLRA 145). Contact the VT NRCS Agronomist for further guidance.

**Fertilization:** Cover crops usually follow fertilized crops and often require no additional fertilization. Applied fertilizers, when used, will be applied according to a current soil test and/or approved nutrient management plan, or organic farm operation plan.

Note: Selection lists available in the following tables are for the user's convenience. Custom entries can be made.

Cover Crop - Species To Be Established:

Field Group	Fields	Cover Crop Species:	After the Following Crops:
1			
2			
3			

**Seeding Rate and Management:** 

Field Group	Seeding Rate Per Acre	Planned Seeding Date	Seeding Method	Date or Stage to Till or Kill Cover Crop	Method to Till or Kill Cover Crop
1					
2					
3					

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### **OPERATION / MANAGEMENT AND MAINTENANCE:**

- Control growth of the cover crop to reduce competition from volunteer plants and shading.
- Control weeds in the cover crop by mowing, herbicide application, or approved methods of organic production.
- When seeding legumes, ensure the proper inoculate is used at planting time. It is best to inoculate just prior to planting. Organic producers should check with Vermont Organic Farmers (VOF) regarding allowable inoculants.
- Do not use treated seed when broadcasting or aerial seeding in a crop to be harvested.
- Establish the cover crop within the stated time period and maintain until the stated time/growth stage.

If needed, an aerial view or a side view of the practice can be shown below. Other relevant information, complementary practices and measures, and additional specifications may be included.

Recommendation: Import digital photographs to indicate practice before and after effects. For instructions regarding importing graphics to this document go to: <a href="mailto:ftp://ftp-fc.sc.eqov.usda.gov/VT/Technical/Help/Adobe\_PDF\_Help\_1.pdf">ftp://ftp-fc.sc.eqov.usda.gov/VT/Technical/Help/Adobe\_PDF\_Help\_1.pdf</a>

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### Time and Manner of Incorporation of Cover Crop:

Cover crops shall be left on the surface over winter. They are generally worked into the soil the following year or left on the surface to provide protective residue. Green manure crops generally will be incorporated into the soil in the spring following seeding, usually when top growth reaches 8 to 18 inches in height.

If you have questions about this planned **Cover Crop** practice contact:

Name:	Tel:	Email:	

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### ADDITIONAL INFORMATION REGARDING COVER CROP:

**Recommended Seeding Rates For Commonly Used Cover Crops** 

<b>Cereal Grains</b>		
Oats	1 to 2 bushels per acre	
Rye	1 to 1.5 bushels per acre	If broadcast and disked into the soil, seeding rates for
Triticale	1.5 bushels per acre	cereal grains shall be increased by 50%.
Winter Wheat	1 to 1.5 bushels per acre	

Grasses		
Annual Ryegrass	10 to 15 pounds per acre	Cool season grasses should be seeded no later than September 1.

Seeding Mixtures on Well Drained and Droughty Sites (Pounds Live Seed)		
Ladino White Clover	5 to 7 pounds per acre	
Sudangrass	25 to 30 pounds per acre	
Buckwheat	75 to 100 pounds per acre	
Hairy Vetch	25 to 30 pounds per acre	

Seeding Mixtures on Somewhat Poorly Drained Soils with Moderate pH		
Medium Red Clover	8 to 10 pounds per acre	

### **CONSIDERATIONS:**

- The cover crop should be terminated as late as feasible to maximize plant growth and still prepare the seedbed for the subsequent crop.
- Increase seeding rate if late seeding is necessary, especially for erosion control.
- Deep-rooted species provide maximum nutrient recovery.
   Consider that grasses utilize more soil nitrogen, and legumes utilize both nitrogen and phosphorus.
- Avoid cover crop species that attract potentially damaging insects.
- Acceptable benefits, for most purposes, are usually accomplished when the plant density is at least 25 stems per feet, the combined canopy and surface cover is at least 60 percent, and the above ground (dry weight) biomass production is at least 2700 lbs/acre.
- Cover crops may be used to improve site conditions for establishment of perennial species.
- Use this reference: <a href="http://attra.ncat.org/attra-pub/covercrop.html">http://attra.ncat.org/attra-pub/covercrop.html</a>

# Map of Vermont MLRA (Major Land Resource Areas) Vermont Major Land Resource Areas MLRA 144A 144B Vermont Major Land Resource Areas MLRA 142 - Champlain Valley 143 - Green Mis and NP. Highlands 144A - Southwest Vermont Uplands 144B East - Vermont Piedmont 145 - Connecticut River Valley United States Department of Agriculture Natural Resource Conservation Service Colchester, Vian Service Colc

### **ADDITIONAL NOTES OR INSTRUCTIONS:**